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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,655	11/28/2000	Dennis Wayne Hurst	8886.001.00	2000

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EXAMINER

TRIEU, LAURENT L

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 04/19/2004

/0

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/722,655

Applicant(s)

HURST ET AL.

Examiner

Laurent L Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 1,5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1 and 5 are objected to because of the following informalities: URL refers to Uniform Resource Locator, not Link. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Reshef et al., US Patent Number US 6,584,569 B2, whose Provisional application number 60/186,892 was filed on 03 March 2000. It shall be referred to as "Reshef" heretofore.

Regarding claim 1 –

- Establishing an Internet connection with the target web site - Reshef discloses, "the scanner dynamically traverses through an entire web application or site..." (Column 3, lines 44+)
- Retrieving a default Web page for the target Web site – Reshef discloses, "Initial step 110 requests the operator to provide the starting or root URL to the scanner 10." (Column 5, lines 61-62)

- Parsing through the default Web page to identify any linked-to Web pages which are referenced by the default Web page – Reshef discloses, “The link under consideration is tested at step 116 to see if it matches a pre-defined filter. The filter may be based on the site's domain name so as to prevent the scanner 10 from leaving the web application or site. (Column 6, lines 1-5)
- Parsing through the default Web page to identify any hidden Uniform Resource Links (URLs) – Reshef discloses, “The link under consideration is tested at step 116 to see if it matches a pre-defined filter. The filter may be based on the site's domain name so as to prevent the scanner 10 from leaving the web application or site. (Column 6, lines 1-5)
- Scanned the target Web site to detect the presence of at least one exploit, and recording any detected exploits; and outputting the security vulnerabilities, comprising the successful exploits – Reshef discloses, “Referring to FIG. 1, the application scanner 10 of the illustrated embodiment employs four stages of operation: a crawl stage 100, an analysis stage 200, an attack stage 300, and a reporting stage 400” (Column 3, lines 38+)

Regarding claim 2 – Reshef discloses, “The scanner 10 enables the detection and assessment of security vulnerabilities within the web site” (Column 7, lines 20+).

Furthermore, “the result of the prior stages is a list of mutated requests or exploits (stored in AttackList) that can potentially cause security errors within the application” (Column 10, lines 40 - 43).

Regarding claim 3 – Reshef discloses, “In this example an old version of a CGI script was left in the file system for backup purposes but its access attributes were not changed to block access...” (Column 8, lines 23 – 25)

Regarding claim 4 - Reshef discloses, “the scanner dynamically traverses through an entire web application or site...” (Column 3, lines 44+)

Regarding claim 5 –

a. memory for storing:

1. a valid Web page database – Reshef discloses, “a database” (Column 5, lines 12+)
2. a vulnerable Web page database – Reshef discloses, “a database” (Column 5, lines 12+)
3. at least one exploit – Reshef discloses, “a database” (Column 5, lines 12+)
4. a security vulnerability database – Reshef discloses, “a database” (Column 5, lines 12+) and

b. a processor connected to the memory and being configured to establish an Internet connection with the target Web site, retrieve a default Web page for the target Web site, parse through the default Web page to identify any linked-to Web pages which are referenced by the default Web page, parse through the default Web page to identify any hidden Uniform Resource Links (URLs), scan

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the target Web site to detect the presence of the at least one exploit, record any detected exploits, and output the security vulnerabilities comprising the successful exploits – Reshef discloses, “the application scanner analyzes the messages that flow (or would ordinarily flow) between a client browser and a server hosting the web application in order to discover the structure or elements of the application's interface with external clients. Then, based on a pre-defined set of hacking rules or techniques, the scanner mutates client requests in various ways, thereby generating exploits that will be unique for each web application. These exploits may then be used to attack the web application. The attack is monitored and the results evaluated and reported to the user.” (Column 2, lines 20-30)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurent Trieu whose telephone number is 703-305-0712. The examiner can normally be reached on Monday - Friday, 7AM - 4PM ET.

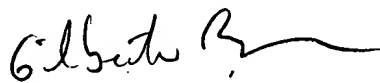
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LLT
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16 March 2004


GILBERTO BARRON
SUPERVISORY PATENT EXAMINER
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